	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	769	(glucagon-like adj peptide) or glp-1 or glp-2	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 15:36			0
2	BRS	L2	2275	lipophilic adj (substituent or group)	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 15:38			0
3	BRS	L3	185319	fatty adj acid	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 15:39			0
4	BRS	L4	82	1 same (2 or 3)	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 15:40			0
5	BRS	L5	412	spacer same ((succinic adj acid) or glu or asp)	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 16:39			0
6	BRS	L6	4	4 same 5	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 16:00			0
7	BRS	L7	2	6458924.pn.	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 16:39			0
8	BRS	L8	3630	spacer same (lys or glu or asp or gly-lys)	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 17:01			0
9	BRS	L9	6	4 same 8	USPAT; US-PGPUB; EPO; DERWENT	2003/02/24 17:01			0
10	BRS	L10	18	jonassen adj ib.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/02/24 17:10			0
11	BRS	L11	34	havelund adj svend.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/02/24 17:10			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
12	BRS	L14	5	hansen adj per adj hertz.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/02/24 17:11			0
13	BRS	L15	5	halstrom adj john.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/02/24 17:12			0
14	BRS	L16	4	(10 or 11 or 14 or 15) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/02/24 17:12			0

FILE 'HOME' ENTERED AT 17:44:50 ON 24 FEB 2003

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'MEDLINE' ENTERED AT 17:45:13 ON 24 FEB 2003

FILE 'CAPLUS' ENTERED AT 17:45:13 ON 24 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'BIOSIS' ENTERED AT 17:45:13 ON 24 FEB 2003

FILE 'EMBASE' ENTERED AT 17:45:13 ON 24 FEB 2003

FILE 'SCISEARCH' ENTERED AT 17:45:13 ON 24 FEB 2003

FILE 'AGRICOLA' ENTERED AT 17:45:13 ON 24 FEB 2003

=> s (glucagon-like peptide) or glp-1 or glp-2
4 FILES SEARCHED...
L1 10431 (GLUCAGON-LIKE PEPTIDE) OR GLP-1 OR GLP-2

=> s lipophilic (w) (substituent or group)
L2 1546 LIPOPHILIC (W) (SUBSTITUENT OR GROUP)

=> s fatty acid
L3 704208 FATTY ACID

=> s l1 (p) l2
L4 8 L1 (P) L2

=> s (succinic acid) or glu or asp or lys or gly-lys
5 FILES SEARCHED...
L5 237276 (SUCCINIC ACID) OR GLU OR ASP OR LYS OR GLY-LYS

=> s l5 (p) spacer

L6 881 L5 (P) SPACER

=> s l1 (p) l3 (p) substituent
L7 5 L1 (P) L3 (P) SUBSTITUENT

=> s l4 or l7
L8 13 L4 OR L7

=> s l8 (p) l6
L9 0 L8 (P) L6

=> s l8 (p) spacer
L10 0 L8 (P) SPACER

=> duplicate remove l8
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L8
L11 8 DUPLICATE REMOVE L8 (5 DUPLICATES REMOVED)

=> d l11 1-8 ibib abs

L11 ANSWER 1 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:609774 BIOSIS
DOCUMENT NUMBER: PREV200200609774
TITLE: Derivatives of GLP-1 analogs.
AUTHOR(S): Knudsen, Liselotte Bjerre (1); Huusfeldt, Per Olaf; Nielsen, Per Franklin
CORPORATE SOURCE: (1) Valby Denmark
ASSIGNEE: Novo Nordisk A/S, Bagsvaerd, Denmark
PATENT INFORMATION: US 6458924 October 01, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 1, 2002) Vol. 1263, No. 1, pp. No Pagination. http://www.uspto.gov/web/menu/patdata.html.
e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
AB The present invention relates to a pharmaceutical composition comprising a ***GLP*** - ***1*** derivative having a ***lipophilic*** ***substituent*** ; and a surfactant.

L11 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 2001:721487 CAPLUS

DOCUMENT NUMBER: 135:273221
TITLE: Preparation of lipophilic human glucagon-like peptide-1 derivatives with protracted action profiles
INVENTOR(S): Knudsen, Liselotte; Huusfeldt, Per Olaf; Nielsen, Per Franklin; Kaarsholm, Niels C.; Olsen, Helle Birk; Bjorn, Soren Erik; Pedersen, Freddy Zimmerdahl; Madsen, Kjeld
PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.
SOURCE: U.S., 136 pp., Cont.-in-part of U.S. Ser. No. 38,432, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268343	B1	20010731	US 1999-258750	19990226
WO 9808871	A1	19980305	WO 1997-DK340	19970822
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
JP 2001011095	A2	20010116	JP 2000-152778	19970822
ZA 9901571	A	19990902	ZA 1999-1571	19990226
US 2001011071	A1	20010802	US 1999-398111	19990916
US 6458924	B2	20021001		
US 2002025933	A1	20020228	US 2001-908534	20010718

PRIORITY APPLN. INFO.: DK 1996-931 A 19960830
DK 1996-1259 A 19961108
DK 1996-1470 A 19961220
US 1997-36255P P 19970124
US 1997-36226P P 19970125
WO 1997-DK340 A2 19970822
US 1997-918810 B2 19970826
DK 1998-263 A 19980227
DK 1998-264 A 19980227
DK 1998-268 A 19980227
DK 1998-272 A 19980227
DK 1998-274 A 19980227
US 1998-38432 B2 19980311

DK 1998-508 A 19980408
DK 1998-509 A 19980408
US 1998-82478P P 19980421
US 1998-82480P P 19980421
US 1998-84357P P 19980421
US 1998-82802P P 19980423
US 1997-35905P P 19970124
JP 1998-511183 A3 19970822
US 1997-922200 B2 19970902
DK 1998-271 A 19980227
US 1998-78422P P 19980318
US 1998-82479P P 19980421
US 1998-85789P P 19980518
US 1999-258187 B1 19990225
US 1999-258750 A2 19990226
US 1999-265141 A2 19990308

OTHER SOURCE(S): MARPAT 135:273221

AB The present invention relates to human ***glucagon*** - ***like*** ***peptide*** -1 (***GLP*** - ***1***) derivs. having a ***lipophilic*** ***substituent*** , compns. contg. these derivs., and to methods for their prepn. A claimed compd. is His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly. Thus, coupling of ***GLP*** - ***1*** (7-37)-OH with Me(CH2)12CO-Glu(OSu)-OCMe3 (Su = succinimidyl) (prepn. given), followed by deesterification with CF3CO2H and chromatog. purifn. gave 8% bis-adduct Lys[Me(CH2)12CO-.gamma.-Glu]26,34- ***GLP*** - ***1*** (7-37)-OH. Several prepd. lipophilic ***GLP*** - ***1*** analogs were tested for protracted plasma concn. in pigs and were found to be much more persistent than ***GLP*** - ***1*** (7-37). In addn., the time of peak plasma concn. was found to vary within wide limits depending on the particular lipophilic ***GLP*** - ***1*** deriv. selected. The efficacy of several prepd. derivs. was tested by stimulation of cAMP in a cell line expressing cloned human ***GLP*** - ***1*** receptor.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:566665 CAPLUS
DOCUMENT NUMBER: 135:122756
TITLE: Preparation of lipophilic human glucagon-like peptide-1 derivatives with protracted action profiles
INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf; Nielsen, Per Franklin; Kaarsholm, Niels C.; Olsen, Helle Birk; Bjorn, Soren Erik; Pedersen, Freddy

Zimmerdahl; Madsen, Kjeld
PATENT ASSIGNEE(S): Den.
SOURCE: U.S. Pat. Appl. Publ., 133 pp., Cont.-in-part of U.S. Ser. No. 265,141.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001011071	A1	20010802	US 1999-398111	19990916
US 6458924	B2	20021001		
WO 9808871	A1	19980305	WO 1997-DK340	19970822
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
JP 2001011095	A2	20010116	JP 2000-152778	19970822
US 6268343	B1	20010731	US 1999-258750	19990226
US 6384016	B1	20020507	US 1999-265141	19990308
US 2002025933	A1	20020228	US 2001-908534	20010718

PRIORITY APPLN. INFO.:
DK 1996-931 A 19960830
DK 1996-1259 A 19961108
DK 1996-1470 A 19961220
US 1997-36255P P 19970124
US 1997-36226P P 19970125
US 1998-84357P P 19970822
WO 1997-DK340 W 19970822
US 1997-918810 B2 19970826
DK 1998-263 A 19980227
DK 1998-264 A 19980227
DK 1998-268 A 19980227
US 1998-38432 B2 19980311
US 1998-78422P P 19980318
US 1998-82478P P 19980421
US 1998-82479P P 19980421
US 1998-82480P P 19980421
US 1998-82802P P 19980423
US 1999-258750 A2 19990226
US 1999-265141 A2 19990308

US 1997-35905P P 19970124
JP 1998-511183 A3 19970822
US 1997-922200 B2 19970902
DK 1998-271 A 19980227
DK 1998-272 A 19980227
DK 1998-274 A 19980227
EP 1998-610006 A 19980313
DK 1998-508 A 19980408
DK 1998-509 A 19980408
US 1998-85789P P 19980518
US 1999-258187 B1 19990225
OTHER SOURCE(S): MARPAT 135:122756
AB The present invention relates to pharmaceutical compns. comprising lipophilic human ***glucagon*** - ***like*** ***peptide*** -1 (***GLP*** - ***1***) derivs. having a ***lipophilic*** ***substituent*** and a surfactant. Thus, coupling of ***GLP*** - ***1*** (7-37)-OH with Me(CH2)12CO-Glu(OSu)-OCMe3 (Su = succinimidyl) (prepn. given), followed by deesterification with CF3CO2H and chromatog. purifn. gave 8% bis-adduct Lys[Me(CH2)12CO-.gamma.-Glu]26,34- ***GLP*** - ***1*** (7-37)-OH. Several prepd. lipophilic ***GLP*** - ***1*** analogs were tested for protracted plasma concn. in pigs and were found to be much more persistent than ***GLP*** - ***1*** (7-37). In addn., the time of peak plasma concn. was found to vary within wide limits depending on the particular lipophilic ***GLP*** - ***1*** deriv. selected. The efficacy of several prepd. derivs. was tested by stimulation of cAMP in a cell line expressing cloned human ***GLP*** - ***1*** receptor.

L11 ANSWER 4 OF 8 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2000256912 MEDLINE
DOCUMENT NUMBER: 20256912 PubMed ID: 10794683
TITLE: Potent derivatives of glucagon-like peptide-1 with pharmacokinetic properties suitable for once daily administration.
AUTHOR: Knudsen L B; Nielsen P F; Huusfeldt P O; Johansen N L; Madsen K; Pedersen F Z; Thogersen H; Wilken M; Agerso H
CORPORATE SOURCE: Department of Molecular Pharmacology, Health Care Discovery and Preclinical Development, Novo Nordisk A/S, Novo Park, DK-2760 Maaloev, Denmark.. lbkn@novo.dk
SOURCE: JOURNAL OF MEDICINAL CHEMISTRY, (2000 May 4) 43 (9) 1664-9.
Journal code: 9716531. ISSN: 0022-2623.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200006
ENTRY DATE: Entered STN: 20000706
Last Updated on STN: 20000706
Entered Medline: 20000629

AB A series of very potent derivatives of the 30-amino acid peptide hormone ***glucagon*** - ***like*** ***peptide*** -1 (***GLP*** - ***1***) is described. The compounds were all derivatized with ***fatty*** ***acids*** in order to protract their action by facilitating binding to serum albumin. ***GLP*** - ***1*** had a potency (EC(50)) of 55 pM for the cloned human ***GLP*** - ***1*** receptor. Many of the compounds had similar or even higher potencies, despite quite large ***substituents*** . All compounds derivatized with ***fatty*** ***acids*** equal to or longer than 12 carbon atoms were very protracted compared to ***GLP*** - ***1*** and thus seem suitable for once daily administration to type 2 diabetic patients. A structure-activity relationship was obtained. ***GLP*** - ***1*** could be derivatized with linear ***fatty*** ***acids*** up to the length of 16 carbon atoms, sometimes longer, almost anywhere in the C-terminal part without considerable loss of potency. Derivatization with two ***fatty*** ***acid*** ***substituents*** led to a considerable loss of potency. A structure-activity relationship on derivatization of specific amino acids generally was obtained. It was found that the longer the ***fatty*** ***acid*** , the more potency was lost. Simultaneous modification of the N-terminus (in order to obtain better metabolic stability) interfered with ***fatty*** ***acid*** derivatization and led to loss of potency.

L11 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:566077 CAPLUS
DOCUMENT NUMBER: 131:194808
TITLE: GLP-1 derivatives of GLP-1 and exendin with a protracted profile of action
INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf; Nielsen, Per Franklin; Madsen, Kjeld
PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9943708	A1	19990902	WO 1999-DK86	19990225

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9932477 A1 19990915 AU 1999-32477 19990225

EP 1056775 A1 20001206 EP 1999-936077 19990225

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

ZA 9901571 A 19990902 ZA 1999-1571 19990226

US 2001047084 A1 20011129 US 2001-886311 20010621

PRIORITY APPLN. INFO.: DK 1998-274 A 19980227

US 1998-84357P P 19980505

WO 1999-DK86 W 19990225

US 1999-312177 B1 19990514

AB The present invention relates to derivs. exendin and of ***GLP*** - ***1*** (7-C), wherein C is 35 or 36, which derivs. have just one ***lipophilic*** ***substituent*** which is attached to the C-terminal amino acid residue. The derivs. have a protracted action relative to ***GLP*** - ***1*** (7-37) and are useful for treating insulin-dependent and noninsulin-dependent diabetes mellitus. The derivs. of the invention can be combined with other antidiabetics or oral hypoglycemic agents. Pharmaceutical formulations contg. the derivs. of the invention are also claimed.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:566075 CAPLUS

DOCUMENT NUMBER: 131:200093

TITLE: Preparation of GLP-1 analogs for treatment of obesity and non-insulin dependent diabetes mellitus

INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf; Nielsen, Per Franklin; Pedersen, Freddy Zimmerdahl

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.

SOURCE: PCT Int. Appl., 270 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9943706 A1 19990902 WO 1999-DK82 19990225

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9926106 A1 19990915 AU 1999-26106 19990225

EP 1060191 A1 20001220 EP 1999-906076 19990225

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, FI, RO

ZA 9901569 A 19990827 ZA 1999-1569 19990226

ZA 9901570 A 19990902 ZA 1999-1570 19990226

PRIORITY APPLN. INFO.: DK 1998-268 A 19980227

WO 1999-DK82 W 19990225

OTHER SOURCE(S): MARPAT 131:200093

AB ***GLP*** - ***1*** analog derivs. His-Xaa8-Xaa9-Gly-Xaa11-Phe-Thr-Xaa14-Asp-Xaa16-Xaa17-Xaa18-Xaa19-Xaa20-Xaa21-Xaa22-Xaa23-Xaa24-Xaa25-Xaa26-Xaa27-Phe-Ile-Xaa30-Xaa31-Xaa32-Xaa33-Xaa34-Xaa35-Xaa36-Xaa37-Xaa38-Xaa39-Xaa40-Xaa41-Xaa42-Xaa43-Xaa44-Xaa45 [Xaa represents an amino acid residue, e.g., Xaa8, Xaa25, Xaa30 = Ala, Gly, Ser, Thr, Leu, Ile, Val, Glu, Asp, Lys; Xaa9, Xaa21, Xaa27 = Glu, Asp, Lys; Xaa11 = Thr, Ala, Gly, Ser, Leu, Ile, Val, Glu, Asp, Lys; Xaa14, Xaa17, Xaa18 = Val, Ala, Gly, Ser, Thr, Leu, Ile, Tyr, Glu, Asp, Lys] having a ***lipophilic*** ***substituent*** were prepd. for the treatment of obesity and non-insulin dependent diabetes mellitus. Thus, Arg26-34,Lys36[N.epsilon.-[.gamma.-glutamyl(N.alpha.-hexadecanoyl)]] ***GLP*** - ***1*** (7-36)-OH was prepd. via reaction of Arg26-34,Lys36 ***GLP*** - ***1*** (7-36)-OH with Pal-Glu(ONSu)-But (Pal = hexadecanoyl, NSU = succinimide residue). The synthesized compds. have a protracted profile of action relative to ***GLP*** - ***1*** (7-37).

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:566074 CAPLUS

DOCUMENT NUMBER: 131:194807

TITLE: Insulinotropic N-terminally truncated GLP-1 lipophilic derivatives with protracted action

INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9943705	A1	19990902	WO 1999-DK81	19990225
AU 9926105	A1	19990915	AU 1999-26105	19990225
EP 1056774	A1	20001206	EP 1999-906075	19990225
JP 2002508162	T2	20020319	JP 2000-533455	19990225

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

PRIORITY APPLN. INFO.: DK 1998-264 A 19980227
DK 1998-509 A 19980408
WO 1999-DK81 W 19990225
OTHER SOURCE(S): MARPAT 131:194807
AB The present invention relates to N-terminally truncated derivs. of human ***glucagon*** - ***like*** ***peptide*** -1 (***GLP*** - ***1***) and analogs thereof having a protracted profile of action, as well as the use of such derivs. in pharmaceutical compns. for the treatment of obesity, insulin dependent or non-insulin dependent diabetes mellitus. The ***GLP*** - ***1*** derivs. have a ***lipophilic*** ***substituent*** attached to at least one amino acid residue.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:163616 CAPLUS
DOCUMENT NUMBER: 128:244341
TITLE: Preparation of lipophilic human glucagon-like peptide-1 derivatives with protracted action profiles
INVENTOR(S): Knudsen, Liselotte Bjerre; Sorensen, Per Olaf; Nielsen, Per Franklin
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Knudsen, Liselotte Bjerre;

Sorensen, Per Olaf; Nielsen, Per Franklin
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9808871	A1	19980305	WO 1997-DK340	19970822
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9738478	A1	19980319	AU 1997-38478	19970822
AU 732957	B2	20010503		
EP 944648	A1	19990929	EP 1997-935509	19970822
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
CN 1232470	A	19991020	CN 1997-198413	19970822
BR 9711437	A	20000118	BR 1997-11437	19970822
JP 2000500505	T2	20000118	JP 1998-511183	19970822
JP 3149958	B2	20010326		
JP 2001011095	A2	20010116	JP 2000-152778	19970822
NO 9900950	A	19990428	NO 1999-950	19990226
US 6268343	B1	20010731	US 1999-258750	19990226
KR 2000035964	A	20000626	KR 1999-701750	19990302
US 2001011071	A1	20010802	US 1999-398111	19990916
US 6458924	B2	20021001		
US 2002025933	A1	20020228	US 2001-908534	20010718

PRIORITY APPLN. INFO.: DK 1996-931 A 19960830
DK 1996-1259 A 19961108
DK 1996-1470 A 19961220
US 1997-35905P P 19970124
US 1997-36255P P 19970124
US 1997-36226P P 19970125
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US 1998-82479P P 19980421
US 1998-82480P P 19980421
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US 1998-85789P P 19980518
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AB Lipophilic human ***glucagon*** - ***like*** ***peptide*** -1 (***GLP*** - ***1***) derivs. and analogs thereof having a ***lipophilic*** ***substituent*** have interesting pharmacol. properties, in particular they have a more protracted profile of action than ***GLP*** - ***1*** (7-37). Thus, coupling of ***GLP*** - ***1*** (7-37)-OH with Me(CH2)12CO-Glu(OSu)-OCMe3 (Su = succinimidyl) (prepn. given), followed by deesterification with CF3CO2H and chromatog. purifn. gave 8% bis-adduct Lys[Me(CH2)12CO-.gamma.-Glu]26,34- ***GLP*** - ***1*** (7-37)-OH (NNC 90-1167). Several prepd. lipophilic ***GLP*** - ***1*** analogs were tested for protracted plasma concn. in pigs and were found to be much more persistent than ***GLP*** - ***1*** (7-37). In addn., the time of peak plasma concn. was found to vary within wide limits depending on the particular lipophilic ***GLP*** - ***1*** deriv. selected. The efficacy of several prepd. derivs. was tested by stimulation of cAMP in a cell line expressing cloned human ***GLP*** - ***1*** receptor.

=> d his

(FILE 'HOME' ENTERED AT 17:44:50 ON 24 FEB 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
17:45:13 ON 24 FEB 2003
L1 10431 S (GLUCAGON-LIKE PEPTIDE) OR GLP-1 OR GLP-2
L2 1546 S LIPOPHILIC (W) (SUBSTITUENT OR GROUP)
L3 704208 S FATTY ACID

L4 8 S L1 (P) L2
L5 237276 S (SUCCINIC ACID) OR GLU OR ASP OR LYS OR GLY-LYS
L6 881 S L5 (P) SPACER
L7 5 S L1 (P) L3 (P) SUBSTITUENT
L8 13 S L4 OR L7
L9 0 S L8 (P) L6
L10 0 S L8 (P) SPACER
L11 8 DUPLICATE REMOVE L8 (5 DUPLICATES REMOVED)

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	64.80	65.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.91	-3.91

STN INTERNATIONAL LOGOFF AT 17:52:24 ON 24 FEB 2003